

Iris yellow ; bill dark greenish brown ; legs greenish plumbeous.

Dimensions in the flesh.

	Length.	Wing.	Tarsus.	Tail.	Bill at gape.	Bill at front.
♂	13·2	6·5	1·2	imperfect	1·55	1·3
♀	13·1	6·5	1·2	5·5	1·5	1·25

5. Monograph of the Genus *Saxicola*, Bechstein. By W. T. BLANFORD, F.R.S., F.Z.S., &c., and H. E. DRESSER, F.Z.S. &c.

(Plates XXXVI.-XXXIX.)

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The following pages contain an attempt to reduce into something like order the excessively confused nomenclature of the species composing the genus *Saxicola*. Having had the advantage of a very large number of specimens for comparison, and having examined most of the original types described by Ehrenberg, Rüppell, Tristram, Salvadori, Cavendish Taylor, Hartlaub, and Finsch, we are enabled in many cases to state positively what are the species named by those naturalists.

This paper was commenced more than a year ago, under the following circumstances:—One of us was engaged in working out the names of the birds of Europe, and with this intent had collected, by the kindness of several friends, a large series of different Chats ; the other had just returned from Persia bringing with him a considerable number of species of the same group. Amongst the united collections (which, besides those of the writers, comprised extensive suites from the cabinets of Lord Walden, Canon Tristram, Messrs. Sharpe, Howard Saunders, Shelley, Cavendish Taylor, and Hargitt) were representatives of all the forms known from the Palæarctic region and of a large majority of the African species ; and we soon ascertained that several alterations were necessary in the received nomenclature, many forms being known by incorrect names, whilst others had been separated on account of differences which were due to age or sex. As it was necessary for each of us to study several species for our own works, we agreed to take up the entire genus together and endeavour to determine the nomenclature of the whole. The task proved more tedious and more difficult than we had anticipated ; but the synonymy of several of the species was sufficiently determined some months since for their names to be published in the ‘Birds of Europe.’ In the names given in the earlier numbers of the same work some errors occur, which will be found corrected in the present paper ; and corrected sheets will be issued in that work. To all the gentlemen who have thus liberally assisted us by the loan of their collections we are greatly indebted ; and we are equally obliged to Dr. Cabanis of the Berlin Museum, Dr. Finsch of Bremen, and Count Salvadori of Turin, all of whom, besides

showing us every possible attention, and affording us all the assistance in their power on the occasion of our visits to their Museums, most kindly allowed us to take away typical specimens for comparison. To Dr. Finsch we are still further indebted for his having lent to us the whole of his manuscripts relating to *Saxicola* and its allies, containing most valuable notes and identifications.

Besides the museums above mentioned, we have visited those of Paris and Frankfort, and examined the fine series of skins in the British Museum.

So far as regards the species of the genus found in the Palæarctic region, the numerous described types which we have had the advantage of examining, and the extensive series of specimens which we have been able, by the kindness of our friends, to compare, have given us great advantages in the study of the different forms, the majority of which, moreover, had been personally collected by one or the other of us in different parts of Europe, Persia, India, or Abyssinia. We feel far less confidence in our determinations of the South-African *Saxicolæ*, both because they are less known to us, and because many of the species, founded on figures and descriptions in the works of the older authors, the types of which are unknown, render identification most difficult. This is especially the case with the species usually known as *S. monticola*, Vieill., *S. cinerea*, Vieill. (*S. tractrac*, Boie), and their allies; and we think it not improbable that some forms, which, for want of sufficient information, we have kept distinct, may be merely different phases of the same species, the distinctions being due to age or sex.

It is exceedingly difficult to define accurately the limits of the genus *Saxicola*, and to decide which of the numerous genera into which it has been divided by systematists are really entitled to separation. It is almost impossible to express in words the distinctions between generic groups which, although the typical forms are well marked, are connected by so many links as those which are found in the *Saxicolinæ* and other subdivisions of the great natural family which comprises the Thrushes and Warblers. In the genus *Saxicola*, as defined by us, we have species which seem nearly as closely allied to *Pratincola*, *Ruticilla*, *Thamnolæa* and *Monticola* as they are to *Saxicola ænanthe*.

There is no important characteristic structural distinction, so far as we know, between several of these allied genera. If any character is more constant than the rest in *Saxicola*, it is the pale or white coloration of the feathers at the base of the tail; yet we feel obliged to admit some species in which this is wanting, and to omit others which exhibit it.

In the forms which we include, besides the species closely allied to *Saxicola ænanthe*, are those for which the generic name *Dromolæa* was proposed by Cabanis (the type being *S. monticola*, Vieill.), and those referred to *Campicola* of Swainson (type *S. pileata*, Gm.). At the same time we consider that *Pratincola* (type *P. rubetra*, L.), which has muscipine affinities, *Cercomela* (type *C. melanura*, Rüpp.), which leads to *Ruticilla*, *Agricola* (type *A. infuscatus*,

Smith), *Myrmecocichla* (type *M. formicivora*, Vieill.), *Thamnolæa* (type *Th. cinnamomeiventris*, Lafr.), and *Oreicola* (type *O. pyr-rhonota*, Vieill.) are fairly distinguishable as separate generic groups, though all closely allied to the true *Saxicolæ*.

The genus *Saxicola* was originally established by Bechstein, in 1802 (*Ornithologisches Taschenbuch von und für Deutschland*, p. 216), and comprised *S. ænanthe*, *S. rubetra*, and *S. rubicola*. The two latter species were separated as *Pratincola* by Koch in 1816 (*Baier. Zool.* p. 190, pl. v. a, fig. 38), *P. rubetra* being the type. In the same year the generic name *Vitiflora* was given by Leach to *Saxicola ænanthe* in his 'Systematic Catalogue of the British Museum,' p. 21; whilst a third generic term, *Ænanthe*, was given also in the same year by Vieillot ('Analyse Nouv. Orn. Elém.' p. 43). Vieillot added a large number of species taken from the works of Levaillant and others in the 'Nouveau Dictionnaire d'Histoire Naturelle,' vol. xxi. Art. *Motteux*. In 1827 Swainson proposed the genus *Campicola*, with *Le Traquet imitateur* of Levaillant (*S. pileata*) as the type. This is a somewhat stouter form than typical *Saxicola*; but there is so complete a passage from one to the other that we cannot separate them.

Meantime a large number of forms had been added to the genus by Lichtenstein, Hemprich, Ehrenberg and others, until the number of species assigned to it by Mr. G. R. Gray in his 'Genera of Birds' (1849), p. 179, amounted to 33. In the course of the 20 years which elapsed between the appearance of the 'Genera' and that of the 'Hand-list,' that number, including the species referred to various subgenera, had swollen to 69; and a few additional species have been described since. In the present monograph we have reduced the number to 37; but we exclude from the genus 12 of the species included in Mr. Gray's first work, and 15 of those enumerated under various subgeneric groups in the second.

We have prefaced the descriptions of the species belonging to our genus by an analytical synopsis, in which all the forms are classed according to the coloration of the males, or of the birds supposed to be males.

In the synonymy we have only included, as a rule, a quotation from the first proposer of each different specific name. We have endeavoured, to the best of our power, to disentangle the confused nomenclature which exists; and we think it will be found that we have considerably diminished the list of nominal species. Something more in this direction perhaps remains to be done amongst the South-African forms.

The genus *Saxicola*, as understood by us, ranges throughout Europe, Western and Central Asia, and the whole of Africa. One species extends to North America; but the genus is unrepresented in the remainder of the American continent, Australia, and the Indo-Malay region, such species as are included in the Indian fauna being found in the central and north-western parts of the Indian peninsula in winter only. There is a remarkable difference between the Palæ-arctic forms and those found in the Ethiopian region: the former

are without exception migratory; the latter, excepting a few which pass the summer in Europe, Northern Africa, or Asia, and the winter in tropical Africa, are non-migratory, and many of them appear to be very locally distributed.

SAXICOLA.

Saxicola, Bechst. Orn. Taschenb. p. 216 (1802).

Bill straight, rather broad at the base, rather longer than the middle toe with claw, compressed, decurved, and more or less indented at the tip. Nostrils basal, supernal, and oval. Gape furnished with a few bristles. First primary very short, second shorter than the third and fourth, third or fourth the longest; coverts and scapulars short. Tail nearly even, the basal portion nearly always white or rufous. Tarsus long, covered in front by one long scale, to which succeed two or three shorter ones. Claws compressed, strong, and moderately curved; the outer toe partly united to the middle toe; lateral toes equal or subequal.

Section I. *Back and shoulders in the males black or blackish.*

A. Uropygium rufescent.

22. *lugubris*, Rüpp. Throat and breast black.

7. *mæsta*, Licht. Breast white.

B. Uropygium white.

a. All the under parts white.

3. *vittata*, Ehr. A dark band from the lores to the shoulders.

b. Abdomen white; throat entirely black.

12. *albonigra*, Hume. Head entirely black; sexes alike; wing 3·9 inches.

13. *picata*, Blyth. Head entirely black; sexes dissimilar; wing 3·5.

10. *leucomela*, Pall. Head whitish above; sexes alike; under tail-coverts rufous; inner quill-webs white; outer tail-feathers black-tipped.

11. *morio*, Ehr. Head whitish above; sexes alike; under tail-coverts white or pale buff; inner quill-webs black; outer tail-feathers black-tipped.

14. *monacha*, Rüpp. Head above white; sexes dissimilar; bill elongate; outer tail-feathers white.

c. Lower parts, except crissum, entirely black.

16. *leucura*, Gm. Head always black; general colour dull black; central rectrices white at base; female sooty brown. Culm. 0·91, tarsus 1·08.

15. *leucopyga*, Br. Crown in adult white; general colour jet-black; central rectrices white at base; female similar to male.

23. *atmori*, Tr. Head black; general colour sooty black; central rectrices black throughout (distinguished from *S. leucura* by blacker rump and more black on the rectrices). Wing 4·1.

17. *opistholeuca*, Strickl. Similar to *S. leucura*, but smaller. Culm. 0·6, tarsus 0·9.

Section II. *Back in the males black; shoulders white.*

24. *monticola*, Vieill. Entirely black, except abdomen and shoulders.
 25. *arnotti*, Tristr. Supercilium white; crown white and black intermixed; entire underparts black.
 26. *leucomelæna*, Burch. Crown grey; rump, upper and under tail-coverts, base of rectrices, and abdomen white.
 27. *griseiceps*, sp. nov. Head and nape ashy grey; otherwise not unlike the preceding species.

Section III. *Back in the males cinereous.*

1. *ænanthe*, L. A black mark through the eye; underparts whitish; wings black; sexes dissimilar.
 29. *cinerea*, Vieill. No black mark through the eye; throat and breast pale cinereous; rump and outer edges of all tail-feathers, except central pair, white; second primary emarginate at tip.
 30. *pollux*, Hartl. No black mark through the eye; throat and breast cinereous; rump similarly coloured to the back; external edges of outer rectrices white; second primary emarginate at tip.
 31. *castor*, Hartl. No black mark through the eye; underparts cinereous throughout; rump and basal portion of all tail-feathers, except the two central pairs, white; second primary not emarginate at tip.
 28. *diluta*, sp. nov. No black mark through the eye; upper parts to the rump pale cinereous; rump and basal portion of all tail-feathers except central pair white; shoulders white or whitish; second primary not emarginate.

Section IV. *Back in the males neither black nor cinereous.*

- A. Interscapular region in adult white in breeding-plumage, rufescent or greyish in winter; wings blackish; sexes dissimilar.
 a. Underparts white in breeding-plumage.
 2. *stapazina*, L. Black band through the eye; throat white.
 b. Throat black.
 4. *rufa*, Brehm. Black on the throat not extending far down the throat; upper parts white in summer, rufescent in winter.
 5. *melanoleuca*, Güld. Black on the throat extending very far down, to the top of the breast; upper parts white in summer, rufescent in winter.
 6. *erythræa*, Ehr. Black extending to the upper breast, and joining that colour on the flanks; upper parts white in summer, greyish in winter.
 B. Feathers on the interscapular region intermixed black and rufescent; wings black.

37. *bifasciata*, Tem. Brown; throat and upper breast black; supercilium, lower breast, and abdomen rufous; tail entirely black.
- C. Interscapular region similarly coloured to wing-coverts.
- a. Throat black.
9. *deserti*, Rüpp. Upper parts sandy brown; lower parts from breast rufescent white; terminal half of outer tail-feathers black; tail-coverts whitish.
8. *xanthoprymna*, Ehr. Upper parts cinereous brown; lower parts from breast whitish; tips of outer tail-feathers alone black; tail-coverts ferruginous.
- b. Throat white; breast and crown black.
36. *pileata*, Gm. Back reddish brown; rump ferruginous; abdomen whitish.
- c. No black on underparts.
32. *albicans*, Wahlb. General colour pale isabelline grey above, white below; tail-coverts and base of all the tail-feathers white; second primary not emarginate at the tip.
33. *schlegeli*, Wahlb. General colour pale isabelline grey above, white below; outer edges of external rectrices white; rump white; second primary emarginate at the tip.
18. *isabellina*, Rüpp. Sandy brown above, isabelline below; tail-coverts and base of outer tail-feathers white.
20. *bottæ*, Bon. Dull dark brown above; throat white; breast and abdomen ferruginous; base of outer tail-feathers white. Wing 3·75.
21. *heuglini*, Finsch. Dark brown above; throat white; breast and abdomen ferruginous; base of outer tail-feathers white. Wing 3·35.
19. *chrysopygia*, De Fil. Hair-brown above, brownish white below; tail-coverts rufous; base of outer rectrices ferruginous; first long primary not emarginate.
34. *galtoni*, Strickl. Upper parts dark brown, lower parts pale brown; tail-coverts and base of outer rectrices ferruginous; first long primary not emarginate.
35. *sinuata*, Sund. Upper parts brown, lower parts pale ashy brown; rump and extreme basal portion of rectrices rufous; first long primary very deeply emarginate near the tip.

1. PALÆARCTIC SPECIES (all migratory).

1. SAXICOLA CENANTHE.

Motacilla cenanthe, L. Syst. Nat. ed. 12, vol. i. p. 332. no. 15 (1766).

Motacilla vitiflora, Pall. Zoog. Ros.-As. i. p. 472. no. 112 (1811).

Cenanthe cinerea, Vieill. Nouv. Dict. xxi. p. 418 (1818).

Le Motteux de Sénégal, Buff. Ois. vi. p. 136, pl. 583. fig. 2 (1783).

Motacilla leucorhoa, Gm. Syst. Nat. i. p. 966 (ex Buff.) (1788).

Saxicola rostrata, Ehr. Symb. Phys. Av. fol. aa (1829).

Saxicola libanotica, Ehr. Symb. Phys. Av. fol. 66 (type examined) (1829).

Saxicola septentrionalis, grisea et cinerea, Brehm, Vögel Deutschl. pp. 403, 405 (1831).

Saxicola oenanthoides, Vigors, Zool. Blossom, p. 19 (1839).

Vitiflora oenanthe et major, Brehm, Vogelfang, p. 224 (1855).

Saxicola leucorhoa, Hartl. Ornith. W. Afr. p. 64. no. 192 (1857).

Adult male in breeding-plumage. Upper parts to the rump ashy grey; forehead and superciliary line pure white; a line through the eye from the lores to the ear-coverts jet-black; wings blackish brown; central rectrices black, basal third white, remaining rectrices white, broadly tipped with black; rump and upper tail-coverts pure white; underparts white to buff, often distinctly rufous on the throat and lower tail-coverts; under wing-coverts and axillaries mixed black and white. Culmen 0.75, wing 3.8, tail 2.35, tarsus 1.1.

Male in winter plumage. Upper parts more or less brown; the eye-stripe less distinct; lower parts more rufous than in the summer plumage; secondaries and wing-coverts broadly edged with rufous.

Young males resemble the female.

Adult female in breeding-plumage. Upper parts dull brown; wings hair-brown; tail as in the male, except that the terminal portion is brownish, not black; underparts light reddish brown, darkest on the breast, and becoming whitish on the abdomen and under tail-coverts.

Adult female in winter. Similar to the above, but with the secondaries and wing-coverts broadly edged with rufous.

Hab. Europe generally; Persia, Syria, Arabia, and Turkestan, Africa north of the equator, Greenland, and Eastern North America; Behring's Straits.

2. SAXICOLA STAPAZINA.

Red or Russet-coloured Wheatear, Edw. Nat. Hist. p. 31, pl. 31 (1743, partim).

Ficedula vitiflora rufescens, Briss. Orn. iii. p. 457. no. 36, pl. 25. fig. 4 (1760).

Ficedula vitiflora rufa, Briss. tom. cit. p. 459. no. 37 (1760, partim).

Motacilla stapazina, Linn. Syst. Nat. p. 331. no. 14 (1766, ex Edw.).

Vitiflora rufa, Steph. Gen. Zool. x. p. 569 (1817).

Oenanthe albicollis, Vieill. Nonv. Dict. xxi. p. 424 (1818).

Saxicola aurita, Temm. M. d'Orn. i. p. 241 (1820).

Sylvia rufescens, Savi, Orn. Tosc. i. p. 223 (1827).

Saxicola amphileuca, Ehr. Symb. Phys. fol. 66 (1829).

Saxicola aurita, var. *libyca*, Ehr. tom. cit. pl. aa (1829).

Vitiflora assimilis, C. L. Brehm, tom. cit. p. 224. no. 7 (1850).

Adult male in breeding-plumage. A narrow frontal line, lores, region round the eye, auricular space, including a large patch on the side of the neck, wings, scapulars, and wing-coverts jet-black;

crown, neck, back, rump, and upper tail-coverts, throat, and entire underparts white, faintly clouded with pale rufous on the breast and back; central tail-feathers white on the basal third, otherwise jet-black, the outermost feathers half white; remaining rectrices white, very broadly tipped with black; under wing-coverts black; legs and bill black; iris brown. Culmen 0·62, wing 3·5, tail 2·65, tarsus 1.

Adult male in winter. Differs from the specimen last described in having the centre of the crown, nape, and back rich pale creamy rufous to rufous brown, the breast being of the same colour, but somewhat paler, and the entire underparts being washed with a rufescent tinge.

Adult female in summer. Differs from the male in having the crown, nape, and back dull brownish grey, the patch on the side of the head and wings much duller, being brownish black, not black; upper wing-coverts slightly tipped with rufous; underparts white, marked with rufous on the breast.

As is the case with all the Chats of this group, the present species often has the white on the back and breast obscured or replaced by a rich rufescent cream-tinge, which appears to form its winter livery, and in all plumages there is some slight trace of this colour either on the back or the breast.

Hab. Southern Europe, Asia Minor, Persia, and northern Africa.

There is no doubt that this is the bird described by Linnæus as *S. stapazina*, although that name has been generally applied to *S. rufa*. The description in the 'Systema Naturæ' is the following:—" *M. ferruginea*, area oculorum alis canaque fuscis," which can only apply to the present species. The first reference is to Edwards's plate, on which both forms are figured.

3. SAXICOLA VITTATA.

Saxicola vittata, Ehrenb. Symb. Phys. fol. cc (1829) (type examined).

Saxicola leucolæma, Antinori & Salvadori, Att. R. Accad. Sci. Tor. viii. p. 32 (1872).

Saxicola melanogenys, Severtz. Turk. Jevotn. p. 120 (1873).

Saxicola melanotis, Sev. tom. cit. pl. viii. figs. 5, 6.

Saxicola leucolæma, Salvad. & Ant. Annal. Mus. Civ. Genova, iv. p. 101, tab. ii. (1873).

Adult. Crown, nape, and upper part of back greyish white; back and wings black; rump and upper tail-coverts white; quills brownish black, secondaries and larger wing-coverts slightly tipped with dirty white; central rectrices white on the basal third, otherwise black, remaining rectrices white, terminated with black, on the outermost pair this colour extends on the outer web along the terminal half; lores and a broad band passing through the eye and joining the base of the wing jet-black; chin, throat, and underparts generally pure white. Culmen 0·7, wing 3·9, tail 2·55, tarsus 0·7. Sex undetermined.

The above is the description of the type specimen in the Berlin

Museum, obtained by Hemprich and Ehrenberg at Moileh in Arabia, this being the only specimen we have examined. According to Severtzoff, the female resembles the female of *S. morio*, but has a white throat.

Hab. Bogos, Northern Abyssinia; Arabia; Turkestan.

4. SAXICOLA RUFÆ.

Red or Russet-coloured Wheatear, Edw. Nat. Hist. p. 31, pl. 31 (1743), partim.

Ficedula vitiflora rufa, Briss. Orn. iii. p. 459. no. 37 (1760), partim.

Sylvia stapazina, Lath. Ind. Orn. ii. p. 530. no. 80 (1790, partim, nec Linn.).

Enanthe stapazina (L.), Vieill. Nouv. Dict. xxi. p. 428 (1818, nec Linn.).

Saxicola stapazina (L.), Temm. Man. d'Orn. i. p. 239 (1820, nec Linn.).

Vitiflora rufa, C. L. Brehm, Vög. Deutschl. p. 406 (1831).

Vitiflora stapazina (L.), C. L. Brehm, Vogelfang, p. 224 (1850, nec Linn.).

? *Vitiflora paradoxa*, C. L. Brehm, *ut supra* (1850).

Adult male in summer. Crown, back, rump, and upper tail-coverts, basal portion of tail, breast, and abdomen white, remainder of the plumage black; crown marked with grey; back and breast slightly washed with rufous cream-colour; the black on the throat does not extend nearly so far down as in *S. melanoleuca*; secondaries slightly tipped with dirty white; central rectrices black, except at the base, where they are white; remainder white, broadly terminated with black, this colour extending on the outermost along the outer web and obliquely across the inner web nearly to the centre of the feather; beak and legs black; iris brown. Culmen 0.68, wing 3.65, tail 2.6, tarsus 0.95.

Adult male in winter. The upper parts are pale ferruginous, often with a brownish tinge on the head; the breast the same but lighter; abdomen and under tail-coverts washed with dull rufous; there are rufous edges to the wing-coverts and secondaries, and the quills are brownish; the black of the throat is partly obscured by white edgings to the feathers.

Adult female in breeding-plumage. Upper parts to the rump earthy brown; rump and upper tail-coverts white; tail as in the male; quills dark brown; throat with the ear-coverts blackish, the feathers with pale edges; remainder of lower parts white, with a rufous tinge, which is more marked on the breast.

Adult female in autumn. Upper parts to the rump dull rufous; the secondaries and wing-coverts with rufous margins; lower parts pale dull rufous, deepest on the breast; throat-feathers black at the base, the feathers edged with whitish.

It is highly probable that old females of this species resemble the male; but the series at our disposal does not enable us to determine

this with certainty. The same remark applies to several other species, especially *S. melanoleuca*, *erythræa*, and *deserti*.

Hab. South-western Europe, including Italy and north-western Africa. It is occasionally found in Germany, and occurs as a straggler in Egypt and the Levant.

5. SAXICOLA MELANOLEUCA.

Muscicapa melanoleuca, Güld. Nov. Com. Petr. xix. p. 468, pl. 15 (1775).

Saxicola xanthomelæna, Ehr. Symb. Phys. fol. aa (1829).

Saxicola eurymelæna, Ehr. tom. cit. fol. bb (1829).

Saxicola albicilla, V. Müll. Naumannia, 1851, iv. p. 28.

Saxicola hendersoni, Hume, Ibis, 1871, p. 480.

Saxicola talas, Severtzoff, Turkest. Jevotn. p. 119, pl. viii. figs. 1, 3, 4 (1873).

In plumage this species passes through the same changes as its close ally *S. rufa*, and only differs from that bird in having the black on the throat extended much further down; and as a rule the males have the white portions of the plumage much purer. In many old males the feathers on the crown and sometimes on the back are considerably worn, the blackish grey basal portion showing very distinctly.

Hab. South-eastern Europe as far west as Malta; North-eastern Africa; Asia Minor, Persia, and Yarkand.

6. SAXICOLA ERYTHRÆA.

Saxicola erythræa, Ehr. Symb. Phys. fol. cc (1829).

Saxicola halophila, Trist. Ibis, 1859, p. 59.

Saxicola libanotica, Trist. Ibis, 1867, pp. 91-94, nec Ehr.

Saxicola finschii, Heugl. Orn. N.O.-Afr. p. 350. no. 299 (1869).

Adult male. Crown, nape, dorsal region, rump, and upper tail-coverts, lower breast, abdomen, and under tail-coverts pure white; sides of the head and neck, throat and upper part of the breast, wings, scapulars, wing-coverts and wing-lining black; quills brownish black; secondaries slightly tipped with dull white; central tail-feathers white on the basal half and black on the terminal portion: other rectrices white, broadly terminated with black, and finally very narrowly tipped with dirty white; bill and legs black; iris dark brown. Culmen 0·7, wing 3·4, tail 2·35, tarsus 1·05.

Young male. Crown, nape, back, and scapulars white, obscured by dull isabelline; wings as in the adult female; tail, throat, and underparts generally as in the adult male.

Adult female. Crown, back, and scapulars dull brownish grey or dust-colour; rump and upper tail-coverts white; quills blackish brown, narrowly margined with dull fulvous; wing-coverts similar, but blacker; tail as in the adult male, but rather duller in colour; superciliary region lighter than the rest of the head; throat, sides of the neck, and auriculars black, considerably obscured by light dusty

brown and dirty white edges ; rest of the underparts white ; under wing-coverts black ; legs and bill black ; iris brown.

Young female. Similar to the adult female, except that the upper parts are paler in colour, and that the throat is not blackish.

Hab. Algeria, Egypt, Palestine, Syria, Arabia, and Persia.

7. SAXICOLA MÆSTA.

Saxicola mæsta, Licht. Verz. Doubl. p. 33 (1823) (type examined).

Saxicola philothamna, Tristr. Ibis, 1859, p. 58 (type examined).

Adult male (summer). Crown and nape white, washed on the former with dirty grey ; back black ; rump and upper tail-coverts rufescent white ; outer rectrices bright rufous at the base, terminal half blackish brown ; quills dull brown, with paler margins ; lores, throat, sides of the head, and neck jet-black ; breast and abdomen white ; under tail-coverts pale rufous. Culmen 0·8, wing 3·8, tail 2·9, tarsus 1·2.

Adult female (November). Upper parts sandy isabelline, darker on the back ; quills dark brown, with isabelline margins ; tail blackish brown, basal half of outer rectrices bright rufous ; tail-coverts, both upper and under, pale rufous ; underparts buffy white.

In winter the general colour of the plumage is duller and greyer, the head and nape of the male being dull brownish grey.

Hab. Algeria, Egypt.

8. SAXICOLA XANTHOPRYMNA.

Saxicola xanthoprymna, Ehr. Symb. Phys. fol. dd. (1829).

Saxicola erythropygia, Taylor, Ibis, 1867, p. 61.

Saxicola mæsta, Sharpe & Dresser, B. of Eur. part 16, Feb. 1873, nec Licht.

Adult male. Crown, nape, back, and wing-coverts dark brownish grey ; forehead and a broad superciliary line extending to the nape white ; wings greyish brown, narrowly tipped with dirty white ; lower part of back, rump, and upper tail-coverts bright rufous ; tail white at the base and to one third of its length on the central, increasing to about two thirds on the outer rectrices, remainder blackish, tipped with white ; throat, sides of the face, and neck black ; underparts dull white, washed with rufous on the flanks ; under wing-coverts black ; under tail-coverts rufous. Total length 6·2 inches, culmen 0·6, wing 3·7, tail 2·7, tarsus 0·95.

Female or young male. Much duller and paler in colour than the male, the eye-streak duller ; throat with whitish edges to the feathers, the black basal portions showing through here and there ; underparts smoky white ; rump, upper and under tail-coverts dull orange-red.

Hab. N.E. Africa ; Arabia Petraea.

Scarcely any Chat is so little known as the present species ; and we only know of three specimens existing in Europe, two of which

are in England, the third being the type in the Berlin Museum. When part xvi. of the 'Birds of Europe' was published, it was believed that *S. mæsta*, Licht., was identical with this species; and only when we visited the Berlin Museum, taking with us Canon Tristram's and many other types, did we discover that this was not the case. We then likewise ascertained that Hemprich and Ehrenberg's specimen of *S. xanthoprymna* is merely a young bird of this species, which therefore will bear their name.

9. SAXICOLA DESERTI.

Saxicola stapazina, Licht. in Eversm. Reise nach Buchara, p. 128. no 12 (1823), nec Linn.

Saxicola deserti, Rüpp. in Temm. Pl. Col. pl. 359. fig. 2 (1825) (type examined).

Saxicola isabellina, Temm. tom. cit. pl. 472. fig. 1 (1829).

Saxicola pallida, Rüpp. Neue Wirbelth. p. 80 (1835-40), nec Atlas, pl. 34. fig. a (type examined).

Saxicola atrogularis, Blyth, Journ. As. Soc. Beng. xvi. p. 130 (1847).

Saxicola salina, Eversm. Bull. Soc. Mosc. xxiii. pt. ii. p. 567, pl. 8. fig. 2 (1850).

Saxicola atrigularis, Bp. Consp. Gen. Av. i. p. 304 (1850).

Saxicola gutturalis, Licht. Nomencl. Av. p. 35 (1854) (type examined).

Saxicola homochroa, Tristr. Ibis, 1859, p. 59 (type examined).

Saxicola montana, Gould, B. of Asia, pt. xvii. (1865).

Saxicola atrogularis, id. l. c.

Saxicola albomarginata, Salvad. Att. Soc. Tor. 1870, p. 507 (type examined).

Adult male in breeding-plumage (Algerian Sahara). Crown, nape, and back sandy isabelline, the crown tinged with grey; rump, with the upper tail-coverts, pure white; quills black, narrowly margined with whitish; innersecondaries brownish black, broadly margined with sandy isabelline; scapulars and larger wing-coverts pale isabelline; median and lesser coverts black, narrowly tipped with white; tail black, white at the base; sides of the head and neck, and entire throat to the breast glossy black; forehead and a superciliary line dull white; breast and abdomen white, on the breast and flanks washed with pale rufous isabelline; under wing-coverts white; axillaries black, tipped with white. Total length 5.25 inches, culmen 0.75, wing 3.5, tail 2.6, tarsus 1.1.

Adult male in winter (Egypt). Differs from the specimen last described in being rather greyer on the back, the black on the throat being somewhat obscured by creamy white margins to all the feathers; and the light margins and tips on the wing-feathers are much more fully developed.

Adult female (Etawah, N.W. India, 19th Jan.). The upper parts are duller and greyer than in the male; the white frontal line and supercilium are scarcely visible; the rump and upper tail-coverts

are washed with rufous isabelline; and the black throat is absent, the entire underparts being sandy isabelline, rather greyer on the neck; wings dull dark brown, tail as in the male.

Saxicola isabellina, Temm. nec Rüpp., *S. pallida*, Rüpp., and *S. homochroa*, Tristr. l. c., are all females of this species; the remaining names apply to the male. *S. pallida*, Rüpp. Atlas, pl. 34. fig. a, is the female of *S. monacha*, q. v.

Hab. South-eastern Russia; Southern and Central Asia as far east as Central India and Yarkand; Northern and North-eastern Africa.

10. SAXICOLA LEUCOMELA.

Motacilla leucomela, Pall. Nov. Com. Petr. xiv. p. 584. no. 6, pl. 22. fig. 3 (1770).

Muscicapa leucomela, Lath. Ind. Orn. i. p. 469. no. 7 (1790).

Sylvia leucomela (Pall.), Temm. Man. d'Orn. p. 138 (1815).

Cenante pleschanka, Vieill. N. Dict. xxi. p. 423 (1818).

Saxicola leucomela (Pall.), Temm. Man. d'Orn. i. p. 243 (1820).

Saxicola lugens, Licht. Verz. Doubl. p. 33 (1823) (type examined).

Vitiflora leucomela (Pall.), Bp. Comp. List B. of Eur. & N. Am. p. 16 (1838).

Saxicola atricollis, v. Müll. Naumannia, 1851, iv. p. 28, "Abysinia."

? *Saxicola capistrata*, Gould, B. of Asia, part xvii. (ptil. hiem.), 1865.

Adult male (Egypt). Crown and nape white, the former strongly tinged with brownish grey; back, scapulars, throat to the upper part of the breast, sides of the head and neck, including a narrow line above the eye, upper part of the flanks, under wing-coverts, and axillaries glossy jet-black; wings duller black than the back, secondaries narrowly tipped with whitish; rump and upper tail-coverts pure white; tail as in *S. morio*, but narrowly tipped with white; breast and abdomen pure white; crissum and under tail-coverts pale rufous; bill and legs black; iris dark brown. Culmen 0.7, wing 3.8, tail 2.75, tarsus 1.05.

Female. Similar to the male.

Hab. Southern and South-eastern Europe, Northern Africa, and Western Asia as far east as Persia.

11. SAXICOLA MORIO.

Saxicola morio, Ehr. Symb. Phys. fol. aa, "Egypt and Arabia" (1829).

Saxicola leucomela, Gould, B. of Asia, part xviii. (1865).

Saxicola leucomela, Jerd. B. of I. ii. p. 131 (1863, nec Pall.).

Saxicola capistrata, Hume, Ibis, 1868, p. 233 (nec Gould).

Adult male (Lahore). Crown and nape greyish white, with the faintest wash of brown; mantle, throat, and upper part of the breast,

including the throat and sides of the face and the feathers immediately over the eye, jet-black; quills dark hair-brown; terminal half of central and the tips of the outer tail-feathers blackish brown; rump, upper and under tail-coverts, lower part of the breast, and abdomen white; under wing-coverts black; under surface of wing dull sooty. Culmen 0·65, wing 3·6, tail 2·65, tarsus 1.

The under tail-coverts in some specimens are tinged with rufous.

Female. Probably similar to the male, but browner on the back. But little is as yet known respecting the changes of plumage due to age and sex in this or the preceding species.

The present species appears as a rule to have the crown much greyer than is the case with *S. leucomela*; and the crissum is almost always white: the chief and most constant characteristic, however, is the colour of the inner webs of the primaries, which is black or blackish, generally the former; but in one or two specimens it is dull, smoky, blackish grey, while in *Saxicola leucomela* the inner webs of the primaries are invariably white. One single specimen of *S. morio*, from Lahore, in Dresser's collection, has the under tail-coverts faintly washed with rufous, but the inner webs of the primaries are very distinctly smoky black. All the rest of the specimens have the crissum and under tail-coverts white. A specimen from Mongolia, in Canon Tristram's collection, has the quills dull brownish and the feathers on the back edged with brown.

Mr. Hume (*Ibis*, 1868, p. 233) states that he has ascertained beyond doubt that this bird is the young male of *S. picata*, Blyth. He states that, out of 20 specimens collected, none were either females or old birds, that he has intermediate forms, and that females shot in company with both forms were identical. We have certainly no specimens of *S. morio* marked as females; but if *S. picata* be the adult, it is singular that no specimens of this form should have been procured by Hemprich and Ehrenberg, and also that no corresponding phase of the closely allied *S. lugens* should be known. We can only say that further evidence is necessary.

We have a male specimen of *S. morio*, shot in Persia in June, when it must have been fully adult; and the bird has been found in the same stage in Turkestan.

Hab. Eastern Europe, North-eastern Africa, and Western and Central Asia, extending to North-western India.

12. SAXICOLA ALBONIGRA.

Saxicola alboniger, Hume, *Stray Feathers*, i. pp. 2, 185 (1872).

Adult male (December). Head, neck, and upper parts, as far as the lower portion of the back, throat to the upper part of the breast, and axillaries jet-black; quills, central rectrices, except at the base, and tips of outer rectrices brownish black; remainder of the plumage pure white. Culmen 0·8, wing 3·8, tail 2·6, tarsus 1.

Female: Similar to the male.

Young. Differs in having the black more sooty in tinge.

Hab. South-eastern Persia, Baluchistan, Sind.

13. *SAXICOLA PICATA*.

Saxicola picata, Blyth, J. A. S. Bengal, xvi. p. 131 (1847).

Dromolæa picata (Bl.), Gould, B. of Asia, part xvii. (1865).

Adult male. Similar to *S. alboniger*, except that it is smaller, and the black extends further down on the lower back. In some specimens the outer rectrices are almost pure white. Culmen 0·75, wing 3·5, tail 2·55, tarsus 1.

Adult female. Upper parts to the rump, wings, central rectrices, except at the base, and tips of the outer rectrices hair-brown; ear-coverts with a slight tinge of rufous; throat pale greyish brown; breast very pale brownish white, passing into white on the abdomen. Culmen 0·73, wing 3·25, tail 2·25, tarsus 0·98.

According to Hume, *Saxicola morio* (*capistrata*, Gould, apud Hume) is the young male of this species (see *S. morio*).

Hab. Persia, Baluchistan, N.W. India.

14. *SAXICOLA MONACHA*.

Saxicola monacha, Rüpp. in Temm. Nouv. Rec. Pl. Col. pl. 359. fig. 1 (1825).

Saxicola pallida, Rüpp. Atlas, Taf. 34 (1826) (type examined).

Saxicola pallida, id. Neue Wirbelth. p. 80, av. hornot. (1835-40).

Saxicola gracilis, Licht. Nomencl. Av. p. 54 (1854) (type examined).

Adult male. Crown, including the upper part of the orbital region, nape, rump, upper tail-coverts, and lower parts from the breast pure white; mantle, wings, throat, sides of neck, and breast jet-black; central rectrices with the terminal half to two thirds dark brown; basal portion and the whole of the outer rectrices pure white, except that on some of the outer rectrices there are occasional brown spots towards the tip. Culmen 0·92, wing 4·1, tail 3·2, tarsus 0·95.

Adult female. Upper parts to the rump hair-brown; quills and terminal portion of central rectrices rather darker brown; rump, upper tail-coverts, and tail, except as above, pale yellowish rufescent, often, as in the male, with brown spots on the terminal portion of the outer rectrices; underparts isabelline white.

Hab. North-eastern Africa, Palestine, and Baluchistan; probably also throughout South-western Asia, in the desert region.

Obs. We have examined the types of *S. monacha* and *S. pallida* in the Frankfort Museum, and of *S. gracilis* in the Berlin Museum. The type of *S. pallida*, figured and described in Rüppell's 'Atlas,' is a female of the present species. In the 'Neue Wirbelthiere' Rüppell refers to this figure as that of an immature bird, and adds that the adult of *S. pallida* is the bird figured by Temminck (Pl. Col. pl. 472. fig. 1) under the name of *S. isabellina*. This figure, however, represents a female of *S. deserti*; and two specimens, both apparently females of *S. deserti*, are in the Frankfort Museum labelled as the female and young of *S. pallida*. From the above it will be seen that we agree with Ehrenberg and Von Heuglin's identification of *S. pal-*

lida. Dr. Finsch, who looked on *S. pallida* as a distinct species, had not the opportunity of examining so large a series of *S. monacha* as we have been able to compare.

15. SAXICOLA LEUCOPYGA.

Saxicola leucura (Gm.), Licht. Verz. Doubl. p. 32 (1823), nec Gm.

Vitiflora leucopyga, C. L. Brehm, Vogelf. p. 225 (1855).

Vitiflora leucuros, C. L. Brehm, *ut suprâ* (1855), partim.

Lutucoa leucocapilla, Paul v. Württ., *fide* C. L. Brehm, *ut suprâ* (1855).

Dromolæa leucocephala, A. E. Brehm, Journ. f. Orn. 1858, p. 62.

Dromolæa leucopygia, A. E. Brehm, *tom. cit.* p. 66.

Dromolæa leucopygia, Br., Tristram, Ibis, 1859, p. 297.

Dromolæa monacha, Loche, Exp. Scient. de l'Alg. i. p. 199 (1867), nec Rüpp.

Dromolæa nigra, Loche, *tom. cit.* p. 200 (1867).

? *Saxicola leucuroides*, Heuglin, Orn. N.O.-Afr. p. 358. no. 308 (1869).

? *Saxicola syenitica*, Heuglin, *tom. cit.* p. 358. no. 309 (1869).

Saxicola cursoria, Savig. Desc. de l'Eg. xxiii. p. 347, pl. 5. fig. 1 (nec Vieill.), *fide* Heugl. *ut suprâ* (1869).

Adult male (Nubia). Crown, nape, rump, upper and under tail-coverts, anal region, and all the rectrices except the two central ones, white; rest of the body above and below, including the feathers above the eye, glossy jet-black; terminal half of the central tail-feathers and two thirds of their shafts black, remainder white. There are occasionally a few black spots on the tips of the outer rectrices. Culmen 0·82, wing 4·1, tail 2·9, tarsus 1·1.

Female. Similar to the male.

Young birds have the crown of the head black.

Hab. Northern Africa and Palestine.

Obs. The "Traquet coureur ou Traquet à callotte et queue blanches" of Levaillant (pl. 190), *Ænanthe cursoria*, Vieill. (N. Dict. xxi. p. 431), might possibly be this species; but Levaillant, in his plate, figures it with the rump and upper tail-coverts jet-black, which debars us from adopting the name*.

16. SAXICOLA LEUCURA.

White-tailed Thrush, Lath. Syn. iii. p. 49, "Gibraltar" (1783).

Turdus leucurus, Gm. Syst. Nat. i. p. 820 (1788, ex Lath.).

Ænanthe leucura, Vieill. Nouv. Dict. xxi. p. 422, "Spain, Southern France" (1818).

Saxicola cachinnans, Temm. Man. d'Orn. i. p. 236, "Southern Europe" (1820).

Dromolæa leucura, Cab. Mus. Heinearium, i. p. 9 (1850).

Vitiflora leucuros, C. L. Brehm, Vogelf. p. 225, "N.E. Africa and S. Europe" (1855), partim.

* Compare Sundevall, "Om Levaillant's Ois. d'Afr.," Kong. Sv. Vet. Akad. Handl. ii. no. 3, p. 45.

Adult male (Algeria). Entire head and body black, excepting the upper and under tail-coverts, which are pure white; wings brownish black; terminal half of the central rectrices and tips of remaining rectrices black; rest of the tail white. Culmen 0·91, wing 3·66, tail 2·92, tarsus 1·08.

Female. Much duller in colour than the male, being dull brownish black, instead of black.

Hab. Southern Europe and North-western Africa.

17. SAXICOLA OPISTHOLEUCA.

Saxicola leucura, Blyth, J. As. Soc. Beng. xvi. p. 131 (nec Gm.).

Saxicola opistholeuca, Strickl. Jard. Contr. to Orn. (1849) p. 60. n. 10.

Saxicola leucuroides, Jerdon, Birds of India, vol. ii. p. 130 (nec Guér.).

Dromolæa opistholeuca (Str.), Gould, B. of Asia, part xvii. ♂ only (1865).

Adult male. Head and body glossy black, except the rump, upper and lower tail-coverts, and lower part of the abdomen, which are pure white; wings blackish brown, lighter on the inner webs, central rectrices white on the basal third, the rest black, remaining tail-feathers white, broadly terminated with black. Culmen 0·6, wing 3·65, tail 2·8, tarsus 0·9.

Female. Sooty black wherever the male is pure black.

Hab. North-western India.

18. SAXICOLA ISABELLINA.

? *Motacilla strapazina*, Pall. Zool. Ros.-As. i. p. 474, nec *stapazina*, Linn. (1811).

Saxicola isabellina, Rüpp. Atlas, p. 52, t. 34 b (1826), type examined.

Saxicola saltator, Ménétr. Cat. Rais. p. 30 (1832).

Saxicola saltatrix (Mén.), Keys. et Blas. Wirbelth. Europ. pp. lix et 192 (1840).

Saxicola ænanthe β, id.

Saxicola squalida, Evers. Add. ad Zool. p. 16 (1842).

Saxicola valida, Licht. Nomencl. p. 35, *nomen nudum* (1854), type examined.

Saxicola opistholeuca ♀ (nec ♂), Gould, Birds of Asia, part xvii.

Saxicola ænanthe, Jerdon, B. of India, ii. p. 132 (1863), nec Linn.

Adult male. Upper parts to the rump dull greyish isabelline or sandy brown, a white superciliary stripe from the base of the bill, extending back over the ear-coverts; lores black; ear-coverts brown; narrow space on the rump and upper tail-coverts white; basal portion of all rectrices white, tips black; the latter colour extending over half or rather more of the central rectrices and about one third of the remainder; quills brown, the tips rather darker; edges and tips of the secondaries pale; lower parts isabelline, whitish on the

chin and darkest on the breast; wing-lining white; bill and legs black. Wing 3·95, tail 2·45, tarsus 1·18, culmen 0·6.

Adult female only differs in having the black on the lores less distinct. In winter the colours are a trifle duller, and the pale edgings on the wing-coverts and secondaries broader.

Hab. South-eastern Europe; Eastern and North-eastern Africa, and Western Asia as far east as North-western India.

19. SAXICOLA CHRYSOPYGIA.

Saxicola chrysopygia, De Filippi, Ann. Zool. Genova, ii. p. 381 (1863).

Saxicola kingi, Hume, Ibis, 1871, p. 29.

Adult. Upper parts to the rump greyish earthy brown; lores dark grey; a greyish white superciliary line from the nostril over the eye; ear-coverts rufescent brown; rump and upper tail-coverts pale rufous; base of tail-feathers bright ferruginous; terminal portion (about one half of the central and one fourth of the remaining rectrices) dark brown; quills very little darker than the back. Young birds (and adults in winter plumage?) have broad rufescent margins to the secondaries and wing-coverts, and pale rufescent tips to the quills and rectrices; chin and upper throat greyish white; breast brownish grey; abdomen paler and more rufescent; lower tail-coverts buff; under wing-coverts and axillaries white; iris dark brown; bill and legs white. Wing 3·5, tail 2·25, tarsus 1·02, culmen 0·7. Sexes alike.

Hab. Persia; Baluchistan; North-western India.

There can, we think, be no question that this bird is the *S. chrysopygia* of De Filippi, as it was collected by Mr. Blanford in Persia and agrees with De Filippi's description. Unfortunately no specimen was preserved by the describer. It agrees perfectly with Mr. Hume's description of *S. kingi*.

2. ÆTHIOPIAN SPECIES (non-migratory).

20. SAXICOLA BOTTÆ. (Plate XXXVI. fig. 1.)

Saxicola bottæ, Bp. Comptes Rendus, 1854, p. 7 (type examined).

Saxicola ferruginea, Heugl. Syst. Uebers. no. 234 (*descript. nulla*).

Saxicola frenata, Heugl. Jour. f. Ornith. 1869, p. 158.

Upper parts to the rump dull brown; a black line through the eye from the lores to the ear-coverts; narrow line above lores, upper tail-coverts, and basal portion of rectrices white; terminal half of outer tail-feathers, and a much larger proportion of the central ones, black; quills dark brown; chin and throat white; breast dull ferruginous; abdomen and lower tail-coverts the same but paler. Wing 3·75, tail 2·35, tarsus 1·2, culmen 0·63. Sexes alike.

Hab. Highlands of Abyssinia; Sennaar, Nubia?

21. SAXICOLA HEUGLINI. (Plate XXXVI. fig. 2.)

Saxicola intermedia, Heugl. Syst. Uebers. p. 26. no. 239 (1855), *desc. nulla*.

Saxicola leucorhoides, Heugl. J. f. O. 1862, p. 291 (nec Guér.), desc. nulla.

Saxicola heuglini, Finsch & Hartl. Vög. N.O.-Afr. p. 259 (1870) (type examined).

Type. Upper parts dull dark blackish brown, some of the feathers on the back margined with dull rufous; quills narrowly tipped, secondaries and wing-coverts broadly margined and tipped with dull rufous; central rectrices black, except at the base, where they are white; rest of tail-feathers white on the basal and black on the terminal half, narrowly tipped with white; underparts white on the breast, lower part of the throat, flanks, and under tail-coverts washed with bright rufous; upper tail-coverts white; over the eye an indistinct whitish line. Wing 3·35, tail 2·45, tarsus 1·05, culm. 0·52.

Hab. Highlands of Abyssinia.

22. SAXICOLA LUGUBRIS.

Saxicola lugubris, Rüpp. Neue Wirbelth. p. 77, pl. 28. fig. 1 (1840) (type examined).

Saxicola brehmii, Salvad. Att. Ac. Tor. 1870, p. 508 (type examined).

? *Saxicola leucuroides*, Guér. Rev. Zool. 1843, p. 162.

Adult male. Crown and nape brownish grey, feathers with black shafts; rump and upper tail-coverts and basal portion of all the rectrices rufous, amounting to about half the length of the central and two thirds of the remaining rectrices; centre of abdomen whitish; under tail-coverts buff; rest of plumage jet-black. Culm. 0·7, wing 3·3, tail 2·4, tarsus 0·9.

Adult female. Is said not to differ from the male in plumage, but is slightly smaller (*fide* Von Heuglin).

The head is very much darker in some specimens than in others, being sometimes scarcely paler than the back; and in one skin thus coloured there is no white on the abdomen. Such a specimen, we think, must have been the type of *S. leucuroides*, which has hitherto always been identified with *S. opistholeuca*, Strickland (q. v.). But Guérin's description of *S. leucuroides* runs thus:—"Tota atra, cauda basi uropygioque imo rufescenti-albidis." Now the tail is, so far as we know, never rufescent at the base in *S. opistholeuca*; and that species, moreover, has not been found by any observer in Abyssinia, whence the bird described by Guérin was brought by Ferret and Galinier. No type of Guérin's species exists in the Paris Museum.

The base of the tail-feathers is occasionally white; and this is the form described by Salvadori under the name of *S. brehmii*.

Hab. Abyssinian highlands.

23. SAXICOLA ATMORI.

Saxicola atmorii, Tristram, Ibis, 1869, p. 206.

Type. Head and body above and below smoky black, upper tail-coverts white; central rectrices black, outer rectrices white, tipped

with black, which extends to some distance up the outer web of the outer feather on each side. Nothing is known of the sexual differences in this species.

Hab. Damara Land, South Africa.

24. *SAXICOLA MONTICOLA.*

Le Traquet montagnard, Levaill. Ois. d'Afr. iv. p. 105, pl. 184. fig. 2 (1805).

Ænanthe monticola, Vieill. N. Dict. xxi. p. 434 (1818, ex Levaill.).

Vitiflora rupicola, Boie, Isis, 1828, p. 320.

Grillivora capensis, Swains. Classif. of B. ii. p. 238 (1837).

Dromolæa æquatorialis, Hartl. Journ. f. O. 1861, p. 112.

Dromolæa monticola, Bocage, Journ. Sc. Lisb. 1867, p. 151.

Adult male. Shoulders, rump, abdomen, lower breast, upper tail-coverts, and the basal portion of all rectrices, except the central pair, white; a narrow streak from the base of the bill to above the eye grey, or mixed white and black; remainder of plumage black. The quills and greater coverts are brownish black, and the thigh-coverts the same; and some black is mixed with the white of the under tail-coverts. On the pair of rectrices next to the central pair the white extends about halfway from the base; on the other rectrices only the tip is black, but this colour extends on the outermost pair some distance up the outer web. Culmen 0·9, wing 4·25, tail 2·85, tarsus 1·25.

In some specimens the second and third rectrices on each side are entirely white, and the least wing-coverts nearest to the carpal joint are black with white edges. In younger specimens the abdomen is mixed white and black.

? *Female.* Very dark brown throughout, except the rump, lower abdomen, tail-coverts, and basal portion of outer tail-feathers, which are white, the under tail-coverts mixed white and brown, and the distribution of white on the tail-feathers as in the male. Culmen 0·85, wing 4·35, tail 2·95, tarsus 1·25. In some specimens, probably younger birds, the whole abdomen is brown.

Hab. South Africa.

We think it highly probable that the bird last described may be the female of *S. monticola*. That it is a female we know, because we have seen two specimens carefully sexed by the late Mr. Anderson, and one by Mr. F. Buckley; but we require much additional information as to the phases of plumage of South-African Stone-Chats.

Obs. We have examined specimens which agree fairly with Levaillant's figure above quoted, upon which Vieillot's species was founded. Levaillant figures on the next plate (185) two birds as immature specimens of this species. These we identify with *S. leucomelæna* (fig. 2) and *S. castor* (fig. 1); but as this plate is not referred to by Vieillot, and as we think it probable that the three figures represent three distinct species, there can be no question that the name of *S. monticola* must be retained for the present species. Of course, as we judge merely from the somewhat meagre materials at our disposal, we may be in error; but as all three forms have

received distinct names, and appear to us to possess good distinctive characters, we have deemed it best to keep them separate. Mr. Layard only quotes plate 184. fig. 2 of Levallant; but he describes the young as grey. The specimens which we have identified with *S. castor* and *S. leucomelæna* have every appearance of being fully mature birds.

25. SAXICOLA ARNOTTI.

Saxicola arnotti, Tristr. Ibis, 1869, p. 206, pl. vi.

Male. Head and body jet-black, a few white feathers on the crown; forehead and supercilia white, wings blackish brown, shoulders white, tail entirely black. Bill from the gape 0·8, wing 3·9, tail 3, tarsus 1·1.

Hab. Adam Kok's New Land, S. Africa (*teste* Layard).

We have not seen a specimen of this species, and copy the above from Mr. Tristram's original description.

26. SAXICOLA LEUCOMELÆNA. (Plate XXXVII. figs. 1 & 2.)

Saxicola leucomelana, Burchell, Travels in S. Afr. vol. i. p. 335, note (1822).

Saxicola leucomelæna, Strickland & Sclater, Jard. Contr. 1852, p. 146. no. 27.

Dromolæa albipileata, Bocage, Journ. Sc. Lisb. 1867, p. 151.

? *Saxicola alpina*, Chapman, Travels in S. Afr. App. p. 399 (1868), *desc. nulla*.

Adult male. Head, nape, and hind neck white, with a greyish tinge; shoulders, rump, and upper tail-coverts, abdomen, and basal portion of all except the two central rectrices white; thigh-coverts and under tail-coverts mixed white and black; rest of the plumage black, glossy black on the back and breast, quills brownish black; the black on the sides of the head includes the lores and the feathers immediately above the eye. On the outer tail-feathers the white often extends quite to the tip, a black spot only being left on the outside of each web; on the outermost tail-feather the black extends much further up the web than on the next two or three. In one specimen the outer tail-feather on each side is pure white, therein agreeing with Professor Barboza du Bocage's description of *S. albipileata*. Some specimens (? winter plumage) have the head French grey, the feathers having a dark central streak; and in one, which may be immature, the whole abdomen is black. Culmen 0·9, wing 4·25, tail 2·85, tarsus 1·2.

Hab. South Africa, Damara Land.

27. SAXICOLA GRISEICEPS, sp. nov. (Plate XXXVII. fig. 3.)

S. capite nuchaque cinereis; humeris, uropygio, supracaudalibus, rectricibus externis omnibus, nisi ad apices, abdomineque albis; collo, dorso, alis, rectricibus mediis, apicibus rectricum cæterarum, loris, regione auriculari, gutture, pectoreque nigris. Culm. long. 0·9, alæ 4·4, caudæ 2·8, tarsi 1·25.

Adult male. Head and nape ashy grey ; shoulders, rump, upper tail-coverts, basal portion of all the outer rectrices, and abdomen white ; back, wings, central rectrices, and tips of the outer rectrices, lores, ear-coverts, throat, and breast black ; on the outermost tail-feathers the black extends further up the outer than the inner web ; but on the third and fourth rectrices from the outside the reverse is the case ; the penultimate rectrices are entirely white (and in some specimens the two outer rectrices on each side are entirely white).

In immature specimens the head is dusky, the feathers dark-shafted, the abdomen is black, with a few white edges to some of the feathers, and the lesser coverts near the carpus are mixed white and black.

In the adult birds there is a rudimentary supercilium. Culmen 0·9, wing 4·4, tail 2·8, tarsus 1·25.

Female? Upper parts to the rump dark cinereous, shoulders white, a few of the median coverts dark-shafted ; quills brownish black ; tail as in the male ; underparts uniform cinereous.

Hab. South Africa, Colesburg, Natal, and Transvaal.

Obs. Of the above species we have examined eight specimens—five in the plumage described as that of the male, and three in that of the female. Of the former, we have two phases of plumage corresponding to precisely similar phases in the birds we have identified with *S. monticola* and *S. leucomelæna*. In one the entire abdomen is white, and in the other white and black mixed ; the first we suppose to be the adult, and the other the young. We therefore do not think that the present can be the young of *S. monticola* ; and some of the specimens described have certainly no appearance of immaturity. We have examined four examples of what we consider to be the male of *S. leucomelæna*—also two of what we consider to be the male of *S. monticola*, and five of the female ; and the plumage is so constant in every case that we cannot but believe that we have before us three well-marked species.

29. *SAXICOLA DILUTA*, sp. nov. (Plate XXXIX. fig. 1.)

S. capite insuper dorsoque pallide cinereis ; humeris uropygio supracaudalibusque albis ; rectricibus mediis nigrescenti-fuscis, cæteris albis nigro terminatis, extremis extus apicem versus plerumque nigro marginatis ; remigibus nigrescenti-fuscis ; lateribus capitis gastræoque perpallide cinereis ; abdomine albescente, infracaudalibus ex albo cum nigro mixtis. In nonnullis exemplis vertex nuchaque pallescunt, et ad medias plumas interscapulii, tectricumque minorum alarum stricæ fuscae adsunt.

Culm. long. 0·8, *alæ* 4·1, *caudæ* 2·55, *tarsi* 1·22, *poll. Angl.*

Adult male. Upper parts to the rump pale cinereous ; shoulders, rump, and upper tail-coverts white ; central pair of rectrices blackish brown, outer rectrices white with black tips, the black usually running some distance up the external web of the outer pair ; quills brownish black ; sides of the head and underparts very pale cinereous, becoming whitish on the abdomen ; under tail-coverts white and black mixed. In some specimens the head and nape are paler

grey than the back, and the interscapular feathers have dark shafts, there are also dark shafts on some of the lesser wing-coverts near the carpus.

We were at first disposed to look upon this form as the female of *S. leucomelæna*; but as we have now seen three specimens marked as males in Mr. Sharpe's collection and two in the British Museum, we can but conclude that it is a distinct species.

Hab. South Africa, Damara Land.

29. SAXICOLA CINEREA.

Le Traquet tractrac, Levaill. Ois. d'Afr. pl. 184. fig. 1 (1805).

Enanthe cinerea, Vieill. N. Dict. xxi. p. 437, 1818, ex Levaill. (nec *En. cinerea*, ibid. p. 418).

Motacilla tractrac, Boie, Isis, 1828, p. 320.

Saxicola levaillantii, Smith, Zool. of S. Afr. notes to pl. 28 (1849).

Adult. Upper parts to the rump brownish cinereous; wings brown, the coverts and secondaries with pale edges; lower rump and upper tail-coverts white; tail-feathers dark brown, the outer webs of all except the central pair white, the quantity increasing on the outermost feathers; lower parts pale isabelline grey; chin whitish; abdomen and under tail-coverts white; ear-coverts pale hair-brown. Culmen 0·8, wing 3·85, tail 2·6, tarsus 1·15.

Hab. South Africa.

Vieillot, it is true, used the same name *Enanthe cinerea* in a previous page of the same work for the common Wheatear; but as both names were published at the same time, and the first in position cannot be used, it does not appear necessary to change the received nomenclature.

30. SAXICOLA POLLUX. (Plate XXXVIII. fig. 1.)

Saxicola pollux, Hartl. P. Z. S. 1865, p. 747.

Adult. Dark ashy grey; greater wing-coverts and quills dusky black; the smaller coverts with grey edgings, the larger coverts and secondaries with whitish edgings; tail-feathers black, the four outer feathers on each side with a broad white external margin, which extends to the tip of the outermost feather and diminishes gradually on the three next, till on the fourth feather from the outside it only extends over the basal half of the feather; underparts lighter grey, fading almost to white on the abdomen and lower tail-coverts; axillaries white; the first long primary deeply emarginate on the inner web at the tip. Culmen 0·75, wing 4·1, tail 2·85, tarsus 1·3.

Hab. South Africa.

The only two specimens we have examined are labelled Beaufort and Karroo.

31. SAXICOLA CASTOR. (Plate XXXVIII. fig. 2.)

Saxicola castor, Hartl. P. Z. S. 1865, p. 747.

Adult male. Upper parts dark ashy grey; rump and upper tail-coverts white; wings and four central rectrices dusky black; outer

rectrices white at the base, with a black tip, which is much broader in the fourth from the outside than in the others; underparts very little paler than the back, fading a little on the abdomen; axillaries and under wing-coverts same colour as the breast; no emargination in the inner webs of primaries. Culmen 0·9, wing 4·3, tail 3·05, tarsus 1·3.

Female. Sooty brown above, rather browner below; ear-coverts hair-brown; rump and tail as in the male. This appears to be distinguished from *S. tractrac* by having the four central tail-feathers blackish brown throughout.

Hab. South Africa, Colesburg, Eland's Post.

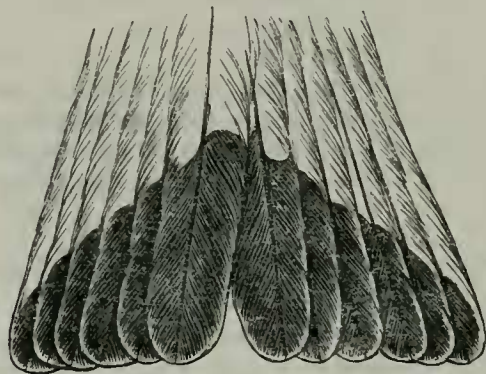
32. SAXICOLA ALBICANS.

Saxicola albicans, Wahl. Œfv. K. Vet. Ak. Förh. 1855, p. 213.

Saxicola stricklandii, Bp., Gurney in Anderss. B. of Damara Land, p. 105 (1872, nec Bp.).

Male. Upper parts to the rump greyish isabelline; rump, upper tail-coverts, and entire under surface of body white, with a faint isabelline tinge; quills dusky brown, with whitish margins and tips;

Fig. 1.



Tail of *Saxicola albicans*.

secondaries much paler, with broader margins; rectrices white at the base and dusky brown on the terminal portion, with whitish tips and margins, the latter broader on the outer feathers; the dusky terminal portion extends nearly halfway up the central rectrices, but only to about one fourth of the outer ones. Culmen 0·8, wing 3·7, tail 2·05, tarsus 1·2.

Hab. Damaraland.

Obs. This species closely resembles *S. schlegeli*, but is distinguishable by being a little paler in colour, by not having the first long primary emarginate at the tip, and by having the entire basal portion of the tail white.

33. SAXICOLA SCHLEGELI. (Plate XXXIX. fig. 2.)

Erithacus schlegelii, Wahl. Œfv. K. Vet. Ak. Förh. 1855, p. 213.

Saxicola modesta, Tristram, Ibis, 1869, p. 206 (type examined).

Adult male. Upper parts ashy grey; rump and upper tail-coverts white; wings and tail dusky black; secondaries and wing-coverts with pale margins; the four outer rectrices with white margins extending to the tip in the outermost, and gradually diminishing till in the fourth the white does not extend over half the basal portion; underparts ashy white, fading to white on the abdomen; the first long primary deeply emarginate on the inner web. Culmen 0·8, wing 3·65, tail 2·5, tarsus 1·2.

Fig. 2.

Tail of *Saxicola schlegeli*.

Female. Precisely similar to the male, except that the first long primary is attenuated but not emarginate.

Hab. Damaraland; South Africa.

S. schlegeli, var. *minor*. This bird, of which we have two specimens, is smaller in size and paler and more sandy in colour than the specimens above described; but one example of the larger form is equally pale, and all are from the same locality. The measurements of the small variety are as follows:—culmen 0·68–0·7, wing 3·4, tail 2·3, tarsus 1·1.

34. SAXICOLA GALTONI.

Erythropygia galtoni, Strickland, Jardine's Contributions, 1852, p. 147.

Saxicola sperata, Layard, Birds of S. Africa, p. 107 (nec Lath.?).

Saxicola familiaris, Gurney, in Andersson's Birds of Damara Land, p. 103 (nec Stephens).

Upper parts to the rump hair-brown; quills the same; ear-coverts rather brighter; rump, upper tail-coverts, and basal portion of all the tail-feathers, except the central pair, ferruginous; central tail-feathers and tips of the others brown; remainder of the outer tail-feathers ferruginous, the brown colour running some distance upon the external web of the outer pair; lower parts rather paler brown

than the back; chin and middle of abdomen still lighter in colour; axillaries isabelline; lower tail-coverts rufous. Culmen 0·65, wing 3·35, tail 2·35, tarsus 1.

Hab. South Africa.

Note.—This species has been identified by most modern writers with either *Saxicola sperata*, Lath., or *S. familiaris*, Stephens. We are unable to agree with either identification. *S. sperata* of Latham (Ind. Ornith. ii. p. 523) was founded on the *Traquet du Cap de Bonne-Espérance* of Buffon, Ois. vi. p. 123, described as having the upper part of the body, including the upper part of the neck and head, of a very brown green (“d’un vert très-brun”), the two central rectrices blackish brown, the two laterals marked obliquely with brown on a tawny ground, the more so as they approach the outside (“les deux latérales sont marquées obliquement de brun sur un fond fauve et d’autant plus qu’elles sont plus extérieures”). This is not very intelligible; but the word “deux” may have been inserted by mistake, and it may mean that there is more brown on the outer rectrices and that the quantity diminishes gradually towards the middle, the central pair being blackish brown throughout. This description can scarcely apply to *S. galtoni*, in which the back has no green tinge and the outer rectrices are ferruginous, not tawny or fulvous.

S. familiaris, Stephens (Shaw, Gen. Zool. xiii. p. 241), was founded on *Le Traquet familier* of Levaillant’s ‘Oiseaux d’Afrique,’ pl. 183. We quite agree with Mr. Gray in excluding this from the genus *Saxicola*. Mr. Gray refers it to *Ædon*; and Levaillant’s plate certainly agrees better with *A. leucophrys*, V., than with any Chat, the breast being represented as spotted. The description of the habits given by Levaillant may very possibly apply to *S. galtoni*; but Stephens’s name can only be referred to the figure.

It will be gathered from the above that we doubt whether the bird referred to by Mr. Gurney, in the note to *S. familiaris* in Andersson’s ‘Birds of Damara Land,’ p. 104, should be called *S. sperata*. We have seen but a single specimen of the form mentioned by Mr. Gurney, and which, as he says, is distinguished from *S. galtoni* (his *S. familiaris*) by the whitish colour of the rump. The distribution of the colours on the rectrices also appears to us different in the two forms. We consider the pale-rumped form undescribed, but we shall not apply a new name on the evidence of a single skin.

35. SAXICOLA SINUATA.

Luscinia sinuata, Sundevall, Om Levaillant’s Ois. d’Afr., Kong. Sv. Vet. Akad. Hand. ii. no. 3, p. 44, note (1857).

Saxicola sinuata, Layard, Birds of South Africa, p. 106.

Adult. Upper parts dark hair-brown, rufescent towards the rump, which latter with the upper tail-coverts is rufous; quills dull black, the secondaries and coverts with pale rufous margins; tail-feathers blackish brown, the basal portion and margins very pale rufous, the amount of the latter colour increasing on the external rectrices,

on the central pair only occupying the extreme base, and on the outer pair covering half of the inner and the whole of the outer web; lower parts pale ashy brown, becoming whitish on the abdomen, darker and rufous on the flanks; ear-coverts similarly coloured to the upper parts; under wing-coverts and axillaries white; the terminal portion of the first long primary is extremely narrow and slightly curved. Culmen 0·63 inch, wing 3·15, tail 1·97, tarsus 1·1.

Hab. South Africa.

36. SAXICOLA PILEATA.

Motacilla pileata, Gm. S. N. i. p. 965. no. 94, ex Lath. (1788).

Le Traquet imitateur, Levaillant, Ois. d'Af. pls. 181, 182 (1805).

Enanthe imitatrix, Vieill. Nouv. Dict. xxi. p. 422 (1818).

Campicola livingstonii, Tristram, P. Z. S. 1867, p. 888.

Male. Forehead and superciliary stripe running back to the nape white; crown black, passing on the nape into the rufous or cinnamon-brown of the back, which becomes ferruginous towards the rump; lower rump and upper tail-coverts white; quills hair-brown, with narrow pale margins and pale tips to the secondaries; central tail-feathers black, outer feathers white on the basal half or rather more, terminal portions black; sides of the head and neck, including the lores, space under the eye, and ear-coverts, and a broad band occupying the greater portion of the breast, black; chin and throat white; abdomen rufescent white; flanks ferruginous; lower tail-coverts pale rufous. Culmen 0·8, wing 3·5, tail 2·65, tarsus 1·35.

S. livingstonii is considered a good and distinct species by Finsch and Hartlaub (Vög. Ost.-Afr. p. 251). They say that the white of the forehead and black of the crown are less extensively developed, that the pectoral band is much narrower, and the size smaller. The band across the chest is certainly less developed; but its breadth is variable in Cape specimens; and as with a series before us we can detect no other distinction, we doubt if *S. livingstonii* be worthy of separation.

Hab. South Africa generally.

37. SAXICOLA BIFASCIATA.

Saxicola bifasciata, Temm. Pl. Col. 472. fig. 2.

Saxicola spectabilis, Hartl. P. Z. S. 1865, p. 428, pl. 23.

Campicola bifasciata (Temm.), Cab. Mus. Hein. i. p. 10.

? *Le grand Motteux ou cul-blanc du Cap de B.-Espérance*, Buff. Ois. vi. p. 135 (1783).

? *Motacilla hottentotta*, Gm. Syst. Nat. i. p. 965 (1788, ex Buff.).

? *Sylvia hottentotta* (Gm.), Lath. Ind. Orn. ii. p. 531. no. 82 (1790).

Adult male. A narrow frontal line and broad supercilia extending backwards along the sides of the head yellowish buff; crown and nape blackish brown; back the same, with brown edges to the feathers; scapulars, sides of the back, and rump isabelline or yellowish buff; wing-coverts and tail black; quills blackish brown;

lores, ear-coverts, and sides of the head, chin, and throat black; lower part of the neck, extending to the scapular region, breast, and abdomen, rufous isabelline; under wing-coverts, axillaries, and thigh-coverts black. Culmen 0·85, wing 3·75, tail 2·6, tarsus 1·3.

Younger males have the crown, nape, and back browner; scapulars and rump more rufous; lower parts from the breast pale ferruginous; wing-coverts and scapulars with pale rufous margins.

Female. Upper parts to the rump hair-brown with an umber tinge, the central portions of the feathers darker, especially on the crown; wings blackish brown, the coverts and secondaries with broad rufous margins; rump and upper tail-coverts pale ferruginous; tail black; lores blackish; ear-coverts hair-brown; lower parts rufous isabelline, whitish on the throat, all the feathers with more or less distinct dark central streaks. Culmen 0·72, wing 3·45, tail 2·4, tarsus 1·25.

Hab. South Africa.

We find it quite impossible to determine whether this is Buffon's "*Grand Motteux*" or not.

As it may probably be useful to working naturalists to know to which species the various Chats enumerated by Mr. G. R. Gray in his well known Hand-list (i. pp. 224-226) belong, we give the following review of them, viz. :—

3205. *S. œnanthe* is the type of the genus *Saxicola*, and is the common European Wheatear.

3206. *S. albicollis* stands as *S. stapazina*.

3207. *S. stapazina* = *S. rufa*.

3208. *S. leucomela* is the species inhabiting South-eastern Europe and Northern Africa, whereas

3209. *S. capistrata* is the eastern form and stands as *S. morio*.

3210. *S. lugens* = *S. leucomela*, no. 3208.

3211. *S. atrogularis* is referable to *S. deserti*.

3212. *S. deserti*.

3213. *S. pallida* = *S. monacha* ♀.

3214. *S. stricklandi* = *S. albicans*.

3215. *S. lugubris*.

3216. *S. isabellina*.

3217. *S. philothamna* = *S. mæsta*, 3228.

3218. *S. eurymelæna* = *S. melanoleuca*.

3219. *S. amphileuca* = *S. stapazina*.

3220. *S. libanotica* = *S. erythræa*.

3221. *S. rufocinerea* is a *Monticola* and not a true Chat.

3222. *S. œnanthoides* = *S. œnanthe*, 3205.

3223. *S. gutturalis* = *S. deserti*, 3212.

3224. *S. montana* = *S. deserti*.

3225. *S. sordida* is a *Ruticilla* or a *Pratincola*, but not a true Chat.

3226. *S. halophila* = *S. erythræa* juv.

3227. *S. homochroa* = *S. deserti* ♀.

3228. *S. mæsta*.
 3229. *S. castor*.
 3230. *S. pollux*.
 3231. *S. leucorrhœa* = *S. ænanthe*.
 3232. *S. rostrata* also = *S. ænanthe*. The type of this species, which should be in the Berlin Museum, is missing there; but there are other specimens from the locality named, collected by Hemprich and Ehrenberg, which are absolutely identical with our *S. ænanthe*, though some have the beak rather stout and long.
 3233. *S. leucuroides* = *S. lugubris*, 3215.
 3234. *S. arnotti*.
 3235. *S. atmorii*.
 3236. *S. schlegelii*.
 3237. *S. modesta* = *S. schlegeli*, 3236.
 3238. *Campicola pileata* = *S. pileata*.
 3239. *C. livingstonii* = *S. pileata*.
 3240. *C. bifasciata* = *S. bifasciata*.
 3241. *C. bottæ* = *S. bottæ*.
 3242. *Cercomela melanura*. } We do not regard these as true
 3243. *C. fusca*. } *Saxicolæ*.
 3244. *C. lypura* = *C. melanura*.
 3245. *C. erythræa* is not a *Cercomela*, but a true *Saxicola*, and stands as *S. erythræa*.
 3246. *C. frenata* = *Saxicola bottæ*.
 3247. *C. heuglini* is a *Saxicola* and not a *Cercomela*.
 3248. *Dromolæa monticola* = *S. monticola*.
 3249. *D. cinerea*.
 3250. *D. leucura* = *S. leucura*.
 3251. *D. picata* = *S. picata*.
 3252. *D. monacha* = *S. monacha*.
 3253. *D. leucopygia* = *S. leucopygia*.
 3254. *D. leucocephala* = *S. leucopygia*.
 3255. *D. opistholeuca* = *S. opistholeuca*.
 3256. *D. æquatorialis* = *S. monticola*, 3248.
 3257. *D. chrysopygia* = *S. chrysopygia*.
 3258. *D. albipileata* = *S. leucomelæna*.
 3259. *D. incompta* we have failed to identify.
 3260. *D. monacha* (Loche nec Rüpp.) = *S. leucopygia*.
 3261. *D. cursoria* we have failed to identify.
 3262 to 3273 we do not include in the genus *Saxicola*.